

### **REMARKS**

Claims 1-24 are presently pending in this application. Claims 1-7 have been amended to more particularly define the invention. Claims 8-24 have been added to claim additional features of the invention.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 1-3 stand rejected under 35 U.S.C. §102(b) as being anticipated by Latham (U.S. Patent No. 5,473,238). Claims 4-5 and 7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Latham in view of Smith (U.S. Patent No. 6,546,456). Claim 6 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Latham and Smith and further in view of Kao (U.S. Patent No. 5,374,933). These rejections are respectfully traversed in the following discussion.

In each of independent claim 1, independent claim 22, and independent claim 23 two distinct elements move the head toward a retract position under two distinct conditions in two distinct manners. Each of independent claim 8 and independent claim 14 is directed to a disk drive apparatus having a controller which is responsive to a power voltage input being above a first predetermined level for providing the power voltage to the rotation drive motor and the head drive section. The controller is responsive to the power voltage input being equal to or less than the first predetermined level and above a second predetermined level for providing the power voltage to the head drive section to drive the head toward the periphery of the information recording disk at a first speed. Dependent claims 9 and 15 add to claims 8 and 14, respectively, that the controller is further responsive to the power level being equal to or less than a second predetermined level for providing reverse electromotive force from the rotation drive motor to drive the head to the periphery of the information recording disk at a second speed. Independent claim 24 is directed to a method in which the head is moved to the retract position in two distinct steps under two distinct conditions.

In each of the independent claims, when the power voltage goes below a lower voltage level, the head is moved in an emergency or forcible operation to the retract position,

for example by reverse electromotive force from the rotation motor, while when the power voltage goes below another voltage level, higher than the lower voltage level, the head moves in a normal operation to the retract position on the basis of the power voltage. Thus, in each independent claim there are two conditions which result in the head being driven to the retract position or to the periphery of the information recording disk in two different manners. The dependent claims likewise include this feature.

Latham discloses embodiments of a disk drive system. While each embodiment of the Latham circuit enables parking of the actuator head, each does so only with the reverse electromotive force, only under one condition, and with only one circuit section.

The Office Action contends that Latham discloses a forcible restoring section at column 3, lines 28-64 and a normal restoring section at column 3, lines 31-37. This contention is traversed. At column 3, lines 31-37, Latham describes operation of the Figure 2 embodiment of his disk drive system when the positive supply voltage  $V_{cc}$  is within a normal range, and thus operating normally, and when  $V_{cc}$  drops below a predetermined abnormally low value. That description continues through line 45 of column 3, describing the use of the back emf to park the head. From line 46 to line 64 of column 3, Latham describes operation of the Figure 3 embodiment of his disk drive system when  $V_{cc}$  drops below the predetermined abnormally low value. There is no disclosure in Latham of both a forcible restoring section for controlling the head drive section to forcibly bring the head to a retract position when the power voltage goes below a first voltage level, and a normal restoring section for controlling the head drive section to move the head toward the retract position on the basis of the power voltage while the power voltage is smaller than the rating voltage but greater than the first voltage level.

Since Latham's circuitry uses the back emf from the spindle motor, his circuitry may correspond, for example, with the forcible restoring section of claim 1, but then there is nothing in Latham which corresponds with the normal restoring section. As to independent claims 8 and 14, Latham discloses parking the head with the spindle motor back emf when the supply voltage is below a certain level, but does not disclose or suggest parking the head with the supply voltage when that supply voltage is below the operating level but above the certain level. Thus, Latham does not anticipate claim 1 or any of the other claims.

Smith shows a disk drive system in a vehicle, and Kao shows navigation data, but neither shows or suggests the features which distinguish the claims from Latham. Accordingly, it is submitted that claims 1-5 and 7-20 distinguish patentably from all the references, whether the references be considered separately or in combination.

#### IV. FORMAL MATTERS AND CONCLUSION

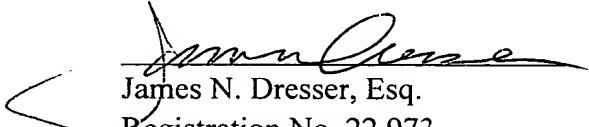
In view of the foregoing, Applicant submits that claims 1-5 and 8-20, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

To the extent necessary, Applicants petition for an extension of time under 37 CFR §1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to Attorney's Deposit Account No. 50-0481 and please credit any excess fees to such deposit account.

Respectfully Submitted,

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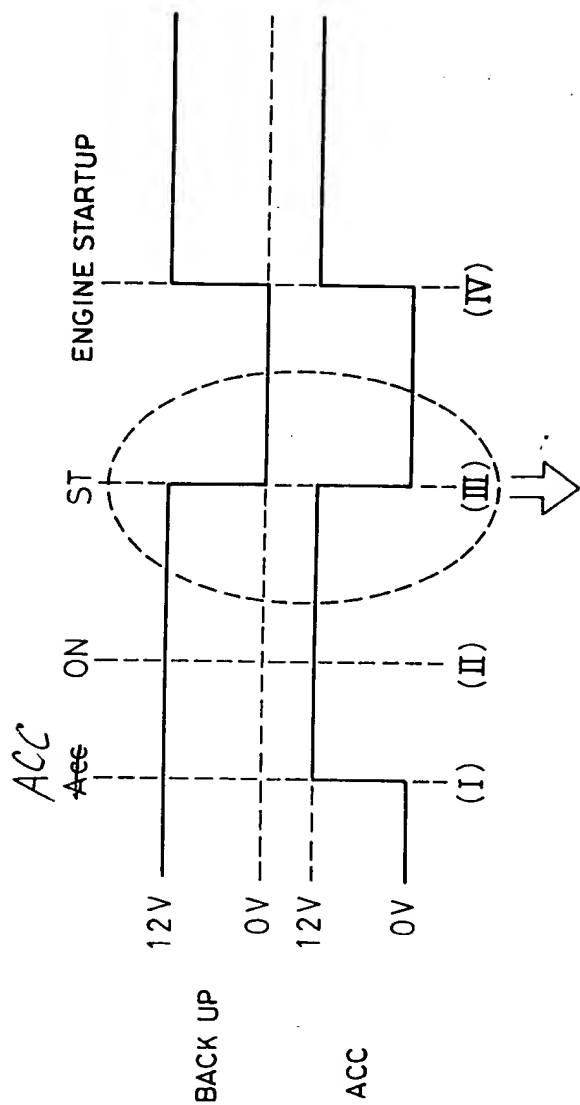


FIG. 7A

FIG. 7B

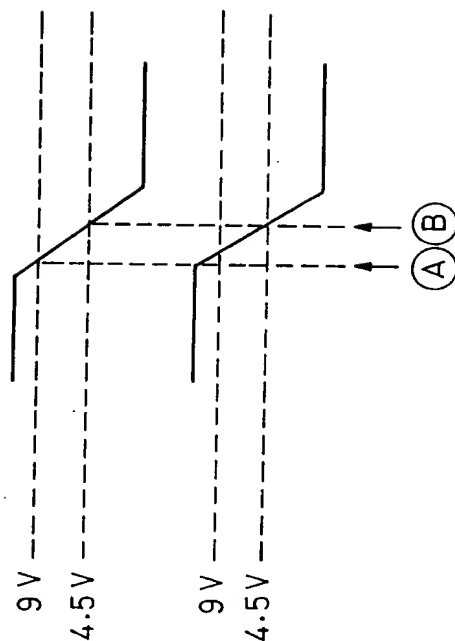


FIG. 7C

FIG. 7D

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FIG. 8A

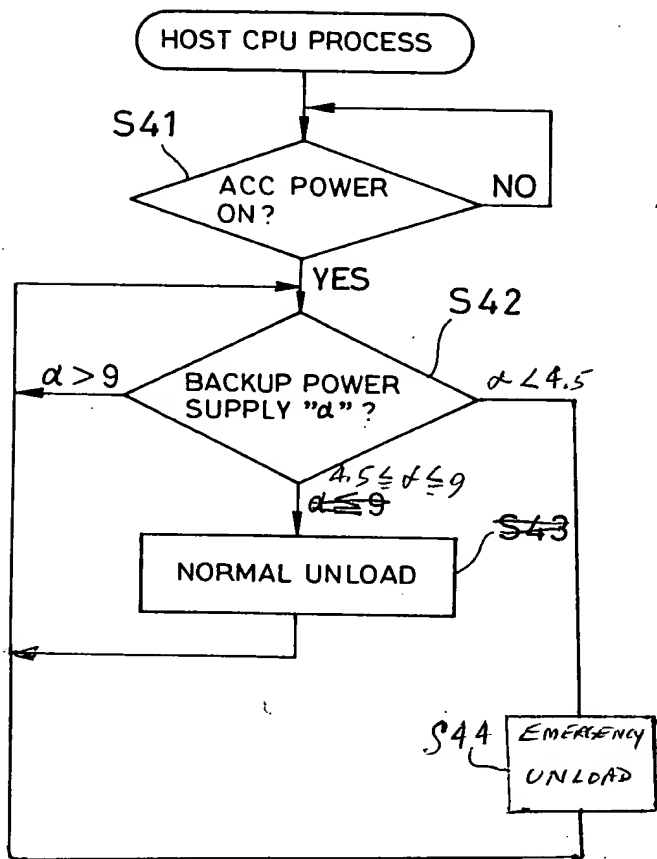
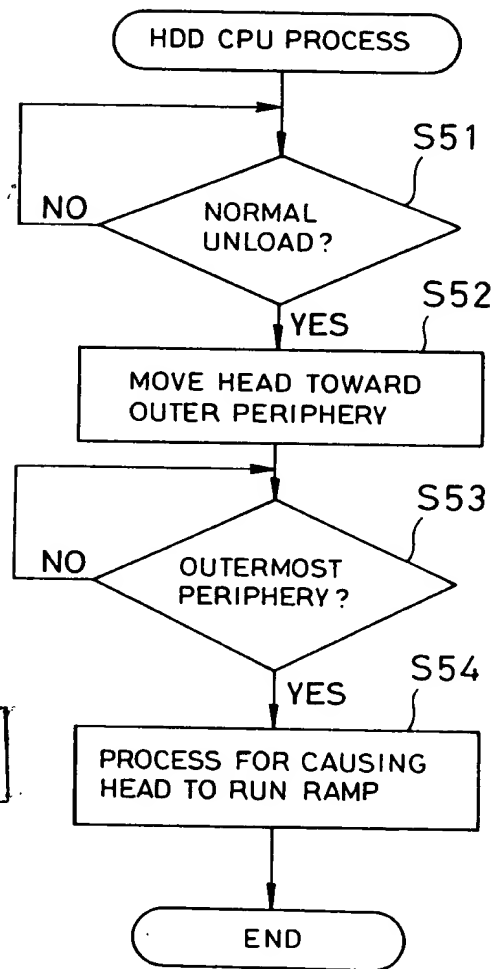


FIG. 8B



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